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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/326,214 06/03/99 TANITSU

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EXAMINER
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MM91/0411

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MATHEWS, A	
ART UNIT	PAPER NUMBER

2851  
DATE MAILED:

04/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/326,214

Applicant:

TANITSU ET AL

Examiner  
Alan Mathews

Group Art Unit  
2851



☒ Responsive to communication(s) filed on Sep 2, 1999 (Preliminary Amendment)

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-104 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-104 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☒ received in Application No. (Series Code/Serial Number) 9/147,259; 08/365,53.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 6 and 7

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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### **DETAILED ACTION**

1. This reissue application was filed without surrendering the original patent or, if the original is lost or inaccessible, an affidavit or declaration to that effect. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

#### ***Oath/Declaration***

2. The reissue oath/declaration filed with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application. See 37 CFR 1.175(a)(1) and MPEP § 1414. Paragraph 7) of Applicant's "REISSUE DECLARATION" has merely listed patented claim 41 and listed new claim 43 without pointing out ~~pointing out~~ the differences between the original claim and the new claim. MPEP § 1414 states on page 1400-13 under II:

In identifying the error, it is sufficient that the reissue oath/declaration identify a single word, phrase, or expression in the specification or the original claim, and how it renders the original patent wholly or partly inoperative or invalid.

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Applicant has not identified a word, phrase, or expression in the original claim and how it renders the original patent wholly or partly inoperative or invalid. See the remainder of MPEP § 1414 for further explanation of this requirement.

### *Claim Rejections*

3. Claims 1-104 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth in paragraph "2" above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion in paragraph "2" above in this Office action.

### *Claim Rejections - 35 USC § 112*

4. Claims 77, 80, and 83 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 77, 80, and 83 are confusing since claims 77, 80, and 83 are device manufacturing methods and claims 76, 78, and 81 from which claim 77, 80, and 83 depend are scanning exposure methods. Furthermore, the recited elements in claim 77, 80, and 83 have not been structurally correlated with the elements of claim 76, 78 and 81, respectively. Is the work piece recited in claims 77, 80, and 83 the same element as the mask or substrate recited in claims 76, 78, and 81?

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*Claim Rejections - 35 USC § 103*

5. Claims 54-57, 64-68, and 76-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi (U. S. Patent No. 5,194,893) in view of Konno et al (U. S. Patent No. 4,497,015) or Mori (U. S. Patent No. 5,296,892) or Shibuya et al (U. S. Patent No. 4,619,508). Nishi discloses in figure 1 a scanning exposure apparatus with a fly eye lens 7 (or optical integrator as recited in column 4, line 44) and an illumination optical system arranged to illuminate a slit area (see Abstract and rectangular aperture AP in figures 2 and 3B). The mask R is movable relative to the slit area. Thus, Nishi discloses substantially the invention claimed in claim 54 except for specifically disclosing that the cross sectional shape that is substantially equal to the slit area. Konno et al discloses in column 3, lines 3-10, selecting the transverse cross-sectional shape of each lens element to meet a particular application. For example, where the region to be illuminated is of a rectangular shape, it is preferable to employ a lens element 102 in the form of a quadrangular prism. Mori discloses in column 5, line 62, making the lens element rectangular. Shibuya et al discloses in figure 2 making the lens elements rectangular. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide Nishi with an integrator having a plurality of optical elements with cross section shapes substantially equal to the slit area in view of Konno et al, Mori, or Shibuya et al for the purpose of more accurate lighting.

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6. Claims 43- 48 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi (U. S. Patent No. 5,194,893) in view of either Shiraishi et al (U. S. Patent No. 5,719,704) or Kudo et al (U. S. Patent No. 4,918,583). Nishi discloses in figure 1 a scanning exposure apparatus with a fly eye lens 7 (or optical integrator as recited in column 4, line 44) and an illumination optical system arranged to illuminate a slit area (see Abstract and rectangular aperture AP in figures 2 and 3B). The mask R is movable relative to the slit area. Thus, Nishi discloses substantially the invention claimed except for specifically disclosing an internal reflection type integrator. Shiraishi et al discloses in figure 27 and figure 33 the use of an internal reflection type integrator 106 or 211. Kudo et al discloses an internal reflection type integrator 10. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide Nishi with an internal type integrator in view of either Shiraishi et al or Kudo et al for the purpose of better and more accurate lighting.

7. Applicant is reminded that any amendment to the claims must include a supplemental declaration before this application can be allowed.

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*Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents on the PTO 1449 are cited for the same reason applicant cited them in his INFORMATION DISCLOSURE STATEMENT.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Alan Mathews at telephone number (703) 308-1706. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ, Adams, can be reach on (703) 308-2847. The fax phone number for this Group is (703) 305-34[31,32]. Any inquiry of a general nature or related to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

*Alan A. Mathews*

**Alan A. Mathews  
Primary Examiner**

AAM

April 9, 2001